

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) ~~Portable~~ A portable surface friction testing apparatus for determining ~~[[the]]~~ a coefficient of friction of a test surface during a test run, the apparatus ~~consisting of comprising~~ a body, ~~the~~ having wheels for contacting the test surface throughout the test run and an underside ~~of which is~~ fitted with at least one slider to induce friction between the body and the test surface as the body moves across the test surface; and means ~~[[of]]~~ for propelling that ~~the~~ body to ~~a predetermined~~ an initial velocity ~~at the commencement~~ of a test run; ~~over which test run the coefficient of friction of the surface is determined by reference to the distance required to cause the at least one slider to bring the body to a standstill, wherein the dimensions of the at least one slider, the force on the slider and the speed of commencement of the test run are selected such that when the test surface is wet the hydro dynamic critical film thickness developed is in the range of 1 to 3  $\mu$ m.~~

2. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 1, wherein the body is ~~in the form of~~ a trolley, ~~and the~~ comprising wheels ~~in contact with the ground for providing, together with~~ and the at least one slider~~[[,]]~~ provide directional stability to the trolley, the wheels and at least one slider ~~all~~ positioned such that ~~the~~ a force between the at least one slider and the test surface can be determined and remains constant under any particular value of uniform deceleration.

3. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 2, ~~where the trolley is arranged to have two wheels in contact with the ground during the test run, with wherein~~ a single slider ~~forming the~~ forms a third point of contact with the ground test surface.

4. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 2, wherein the means for propelling the trolley comprises a ramp of known incline and length.

5. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 4, wherein the trolley comprises at least one additional wheel, wherein the ramp and ~~the~~ trolley are arranged such that the at least one additional wheel supports the trolley on the ramp during a period in which the trolley accelerates down the ramp, but wherein the mass on the at least one additional wheel is transferred to the at least one slider at commencement of the test run.

6. (Currently Amended) ~~Portable~~ A portable surface friction testing apparatus for determining ~~[[the]]~~ a coefficient of friction of a test surface, the apparatus ~~consisting of comprising~~ a body, ~~the including an~~ underside of ~~which is~~ fitted with at least one slider to induce friction between the body and the test surface as the body moves across the test surface, and means of propelling ~~that the~~ body to ~~a predetermined an~~ initial velocity ~~at the commencement of~~ a test run~~[[,]]~~ over which ~~test run~~ the coefficient of friction of the test surface is determined by reference to ~~[[the]]~~ a distance required ~~to cause~~ by the at least one slider to bring the body to a standstill, wherein:

the body is ~~in the form of~~ a trolley comprising wheels in contact with the ~~ground test surface~~ for providing, together with the at least one slider, directional stability to the trolley, the wheels and ~~the~~ at least one slider ~~[[all]]~~ positioned such that ~~[[the]]~~ a force between the at least one slider and the test surface can be determined and remains constant under any particular value of uniform deceleration;

the trolley ~~is arranged to have~~ has two wheels in contact with the ~~ground test surface~~ during the test run, with a single slider forming ~~[[the]]~~ a third point of contact with the ground;

the means for propelling the trolley comprises a ramp of ~~known~~ known incline and length;  
and

the trolley comprises at least one additional wheel and the ramp and trolley are arranged such that the at least one additional wheel supports the trolley on the ramp during a period in

which the trolley accelerates down the ramp, but wherein the mass on the at least one additional wheel is transferred to the at least one slider at commencement of the test run.

7. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 6 wherein ~~[[the]]~~ dimensions of the at least one slider, ~~[[the]]~~ a force on the slider and the ~~speed of commencement of the test run~~ initial velocity are selected such that when the test surface is wet the hydro-dynamic critical film thickness developed is in the range ~~[[of]]~~ from about 1 to 3  $\mu\text{m}$ .

8. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 2 wherein the trolley comprises two wheels arranged to be in contact with test surface during a test run, the two wheels being on a common axis and locked together to improve direction stability.

9. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 6, wherein the body is propelled during the test run only by the initial kinetic energy of the body until the body comes to rest, ~~[[the]]~~ a distance traveled during the test run being indicative of the coefficient of friction of the surface over which the body has traveled.

10. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 6, wherein the at least one slider is a ~~plastics~~ plastic or rubber material.

11. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 6, wherein the hydro-dynamic critical film thickness developed is in the range from about 1.5 to 2.5  $\mu\text{m}$ .

12. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 10, wherein the hydro-dynamic critical film thickness developed is in the range ~~[[of]]~~ from about 1.9 to 2.1  $\mu\text{m}$ .

13. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 6, wherein the apparatus comprises means for determining the distance traveled by the body.

14. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 13, wherein the distance traveled is ~~automatically~~ used to calculate the coefficient of friction for the test surface.

15. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 14, further comprising a look-up table or graph for determining the coefficient of friction corresponding to the distance traveled by the body.

16. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 13, wherein the body determines and displays the coefficient of friction.

17. (Currently Amended) ~~Apparatus~~ The apparatus as claimed in Claim 6, wherein the mass of the body is less than 6 kg.

18. (Currently Amended) Apparatus as claimed in Claim 6, wherein ~~the trolley comprises two wheels arranged to be in contact with test surface during a test run~~, the two wheels ~~being~~ are on a common axis and locked together to improve direction stability.

19. (New) A portable surface friction testing apparatus for determining a coefficient of friction of a test surface during a test run, the apparatus comprising a body having wheels for contacting the test surface throughout the test run and an underside fitted with at least one slider to induce friction between the body and the test surface as the body moves across the test surface; and means for propelling the body to an initial velocity of a test run;

wherein the body is a trolley, and the wheels and the at least one slider provide directional stability to the trolley, the wheels and at least one slider positioned such that a force between the at least one slider and the test surface can be determined and remains constant under any particular value of uniform deceleration; and

wherein a single slider forms a third point of contact with the test surface.

20. (New) The apparatus as claimed in Claim 1, wherein over the test run the coefficient of friction of the test surface is determined by reference to a distance required by the

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at least one slider to bring the body to a standstill, wherein dimensions of the at least one slider, a force on the at least one slider and the initial velocity of the test run are selected such that when the test surface is wet the hydro-dynamic critical film thickness developed is in the range from about 1 to 3  $\mu\text{m}$ .